

## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/JP2004/051945

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 H01L23/498 H01L23/31 H01L23/50		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01L		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/153605 A1 (CHANG NAI-SHUNG) 24 October 2002 (2002-10-24)	1, 2, 6-10
Y	paragraphs '0006!, '0015!, '0027!; claim 5; figures 2,3	3-5
X	WO 96/23320 A (INTEL CORPORATION) 1 August 1996 (1996-08-01)	1, 2, 6-10
Y	figures 1-3 and the corresponding description	3-5
Y	US 6 509 646 B1 (LIN WEI-FENG ET AL) 21 January 2003 (2003-01-21) the whole document	3
Y	US 2002/017399 A1 (CHANG HUEY-RU ET AL) 14 February 2002 (2002-02-14) paragraph '0064!	4, 5
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<div style="display: flex; justify-content: space-between;"> <span><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.</span> <span><input checked="" type="checkbox"/> Patent family members are listed in annex.</span> </div>		
* Special categories of cited documents :		
<div style="display: flex;"> <div style="flex: 1;"> <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="flex: 1;"> <p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>*Z* document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search  <div style="text-align: center;">15 March 2005</div>	Date of mailing of the international search report  <div style="text-align: center;">23/03/2005</div>	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <div style="text-align: center;">Cortes Rosa, Joao</div>	

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 2002/142574 A1 (CHEN SHU-HUI ET AL) 3 October 2002 (2002-10-03) the whole document -----	1-10
A	US 2002/121679 A1 (BAZARJANI SEYFOLLAH ET AL) 5 September 2002 (2002-09-05) the whole document -----	1-10
A	US 6 448 639 B1 (MA SHU JUNG) 10 September 2002 (2002-09-10) the whole document -----	1-10

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